

ZL-27A

Level 3 Post Emulsifiable Fluorescent Penetrant

Post-emulsifiable ZL-27A penetrant is a high-sensitivity penetrant designed for inspection with the use of an emulsifier to remove surface penetrant. Both Method B lipophilic emulsifier ZE-4E and Method D hydrophilic emulsifier ZR-10E can be used to remove surface ZL-27A penetrant before developer application. Developers can be ZP-4B dry powder developer, ZP-14A water soluble developer in a non-agitated tank, ZP-5B water suspendible developer in an agitated tank or ZP-9F non-aqueous developer. With a UV-A light source, flaw indications will appear as a bright green-yellow fluorescence. ZL-27A has a high flash point, and is designed to be used in open dip tanks.

ZL-27A is listed on the QPL SAE AMS 2644 Qualified Product List and is approved for use by Pratt & Whitney.

SPECIFICATION COMPLIANCE

- AECL
- AMS 2644
- ASME
- ASTM E1417
- ASTM E165
- Boeing BAC 5423 PSD 6-46 or 8-4
- Boeing PS-21202
- ISO 3452
- MIL-STD-2132
- MIL-STD-271
- NAVSEA T9074-AS-GIB-010/271
- Pratt & Whitney PMC 4353
- QPL SAE AMS 2644

PROPERTIES

Flash Point	> 200°F / 93°C
Density	0.93 g/cc / 7.72 lb/gal
Viscosity (at 100°F / 38°C)	9.65 cs
NPE-Free	Yes

BENEFITS

- Bright indications
- Resists over removal
- High flash point

APPLICATIONS

Defect location: open to surface

Ideal for:

- Precision castings
- Precision forgings
- Machined components

Defect examples:

- Fine cracks
- Seams
- Porosity

USE RECOMMENDATIONS

NDT Method	Penetrant Testing, Fluorescent
Type	1
Method(s)	B / C / D
Sensitivity Level	3, high sensitivity
Required Equipment	UV light source
Temperature Range	40 to 125°F / 4 to 52°C

PACKAGING

Aerosol can, case of 12	01-3187-78
5 gal / 18.9 L pail	01-3187-40
20 gal / 75.7 L drum	01-3187-30
55 gal / 208 L drum	01-3187-45

HEALTH AND SAFETY

Review all relevant health and safety information before using this product. For complete health and safety information, refer to the product Safety Data Sheet, which is available at www.magnaflux.com.